

## AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

### LISTING OF CLAIMS

1. (currently amended) A method for interference management of a processing communications satellite serving multiple user terminals in a satellite based cellular communications system, said method comprising:

receiving a request for service from a user terminal;

accessing ~~at least one communications system parameter selected from a group~~ database of communications system parameters consisting of including user terminal database parameters, antenna pattern parameters, spacecraft/antenna pointing error parameters, and link condition database parameters;

applying an algorithm to at least one communications system parameter from the database of communications system parameters to determine ~~determining~~ a connection parameter to minimize intra-system interference based in part upon the ~~selected~~ database of communications system parameter parameters for the user terminal;

allocating the connection parameter to ~~this~~ the user terminal; and

making a communications connection with the processing communications satellite by the user terminal using the connection parameter.

6. (original) The method as defined in claim 1 further comprising monitoring if the communications connection is still active.

7. (currently amended) The method as defined in claim 6 further comprising redetermining the connection parameter for the user terminal based upon an updated communications system parameter database of communications system parameters.

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8. (previously amended) The method as defined in claim 1 wherein the connection parameter is a frequency channel.

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9. (original) The method as defined in claim 1 wherein the connection parameter is a time slot.

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10. (currently amended) The method as defined in claim 1 further comprising updating the group database of communications system parameters after the communications connection ends.

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17. (previously amended) The method as defined in claim 19 further comprising redetermining the frequency channel and time slot allocation after a determination is made that the communications connection is still active.

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19. (currently amended) A method for interference management of a processing communications satellite serving multiple user terminals in a satellite based cellular communications system, said method comprising:

receiving a request for service from a user terminal;

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accessing ~~at least two of known~~ a database of communications system parameters from including a user database, antenna pattern database, spacecraft/antenna pointing error database and link condition database;

applying an algorithm to at least one communications system parameter from the database of communications system parameters to determine ~~determining~~ a frequency channel and time slot parameter allocation for the user terminal to minimize

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intra-system interference based upon ~~said two~~ the database of communications system parameters;

allocating the frequency channel and time slot parameter to the user terminal;

making a communications connection by the user terminal using the frequency channel and time slot parameter;

periodically redetermining the frequency channel and time slot parameter allocation for the user terminal to continue to minimize intra-system interference; and updating the databases after the communication connection has ended.

20. (currently amended) The method as defined in claim 19 comprising including within the ~~plurality~~ database of communications system parameters location of active user terminals and frequency channel and time slots allocated to the active user terminals.